PLAN

OF

EDUCATION,

IN THE MARISCHAL COLLEGE

AND

UNIVERSITY OF ABERDEEN,

WITH THE REASONS OF IT.

Drawn up by Order of the FACULTY.

ABERDEEN:

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MDCCLV.

MARISCHAL COLLEGE, AUG. 28. 1755.

The Faculty, having heard read the Account of the Plan of Education profecuted in this College, which Mr. ALEXANDER GERARD, Profeſſor of Philoſophy, had, by their order, drawn up, appointed it to be printed.

Signed,

T. BLACKWELL Principal.

THE PRINCIPAL and PROFESSORS of the MARISCHAL COLLEGE of ABERDEEN, having lately made a very material alteration in the order of teaching Philoſophy, they think it incumbent upon them to lay before the public, which is intereſted in every thing that relates to education, the reaſons which determined them to deviate from the hitherto received method.

THE order formerly obſerved in this College, was that followed by moſt of the antient Philoſophers, which was afterwards eſpouſed by the Scholaſtics, and generally adopted by all the Univerſities in Europe: they began with Logic, then proceeded to Ontology, Pneumatic, Morals, Politics; and, laſt of all, taught Natural Philoſophy. The Peripatetic Philoſophy, at leaſt as far as it was eſpouſed by the commentators and followers of Ariſtotle, was in great

meaſure made up of verbal ſubtleties, and theories ill grounded, tho' ingeniouſly deviſed. Theſe were ſupported by arguments moulded into an artificial form ; the mechaniſm of which muſt firſt of all be underſtood ; and it was laid open by the Logic then in uſe. The chief buſineſs of that Philoſophy, was, to expreſs opinions in hard and unintelligible terms ; the ſtudent needed a dictionary or nomenclature of the technical words and authoriſed diſtinctions; experiment was quite neglected, ſcience was to be reaſoned out from general principles, either taken for granted, or deduced by compariſon of general ideas, or founded on very narrow and inadequate obſervation : Ontology, which explained theſe terms and diſtinctions, and laid down theſe principles, was therefore introduced immediately after Logic. By theſe two, the ſtudent was ſufficiently prepared for the verbal, or at beſt, ideal inquiries of the other parts.

But Philoſophy has been ſince that time happily reformed, and is become an image, not of human phantaſies and conceits, but of the reality of nature, and truth of things. The only baſis of Philoſophy is now acknowledged to be an accurate and extenſive hiſtory of nature, exhibiting an exact view of the various phœnomena for which Philoſophy is to account, and on which it is to found its reaſonings. This being the reformed ſtate of Philoſophy, great inconveniencies muſt be found in proſecuting the ſcholaſtic order of the ſciences. The ſtudent muſt make a tranſition at once from words and languages to Philoſophy, without being previouſly introduced to the knowledge of facts, the ſole foundation of, and preparation for it; he muſt be hurried, at the firſt, into the moſt abſtruſe, difficult and ſubtle parts of it; he muſt be put upon examining the nature, foundation and different kinds of evidence

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and reaſoning, before he is acquainted with any ſpecimens of theſe kinds, by which they may be illuſtrated. And in proportion as Philoſophy is more improved, and more thoroughly reformed, theſe inconveniencies muſt become more ſenſible.

THE view of theſe induced the Maſters of the Mariſchal College to think of altering the hitherto received order; and, after the moſt mature deliberation, made them at laſt reſolve, that their ſtudents ſhould, after being inſtructed in languages and claſſical learning, be made acquainted with the Elements of Hiſtory, Natural and Civil, of Geography and Chronology, accompanied with the Elements of Mathematics; that they ſhould then proceed to Natural Philoſophy, and, laſt of all, to Morals, Politics, Logic and Metaphyſics. And if, by adopting this order, they avoid the inconveniencies above-mentioned, and make the ſciences to follow one another, according

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to the natural connexion of their ſubjects, and the gradual openings of the human mind, may they not expect the approbation of the public, and better fruits of their labours, in forming the minds of youth, ſo as they may be poſſeſſed of more real knowledge, and that more uſeful for the various purpoſes of human life? That this is the caſe, the following pages are intended to evince.

THAT Logic ſhould be taught firſt, appears to be ſupported by an argument, ſpecious enough on a tranſient view, viz. "That as it profeſſes to teach the method "and rules of reaſoning, it is natural to "begin with learning theſe rules, and then "to apply them in the ſeveral ſciences." But however plauſible this argument may at firſt ſight ſeem, it will, on cloſer attention, be found not at all ſolid or concluſive.

THE world is now pretty well ſatisfied that

that the underſtanding cannot be aided in the diſcovery of truth, by a Logic like the Scholaſtic, founded on an arbitrary diſpoſition of all things under certain general names, and conſiſting only of fine-ſpun obſervations concerning the combination of words in propoſitions, and of propoſitions in artificial ſyllogiſms. This may aſſiſt one in diſputing readily and artfully in defence of either truth or error : but it can never contribute to promote knowledge, and guard us againſt miſtakes. The Logic that can anſwer this end, muſt accurately examine and carefully aſcertain the various kinds of evidence, their foundations, their laws, the ſubjects to which they belong, the degree and ſpecies of aſſent which they produce ; it muſt lay open the ſources of error, the cauſes of falſe judgment, and the conduct of the underſtanding by which it may be prevented ; it muſt explain the different methods of invention, at once ſuited to the conſtitution of the mind, and to the varieties

varieties of the objects it is converſant with.

THIS is one of the moſt abſtruſe and difficult branches of Philoſophy, and therefore quite improper to begin with. It has a ſtrict dependence on many parts of knowledge; theſe muſt of conſequence be premiſed, before it can be rightly apprehended. The natural hiſtory of the human underſtanding muſt be known, and its phœnomena diſcovered; for without this, the exertions of the intellectual faculties, and their application to the various ſubjects of ſcience will be unintelligible. Theſe phœnomena muſt be not only *narrated*, but likewiſe, as far as poſſible, *explained*; for without inveſtigating their general laws, no certain and general concluſions concerning their exerciſe can be deduced.

NAY, all ſciences, all branches of knowledge whatever, muſt be premiſed as a ground-work to genuine Logic. Hiſtory

has one kind of evidence ; Mathematics, another ; Natural Philoſophy, one ſtill different ; the Philoſophy of human nature, another, diſtinct from all theſe : the ſubordinate branches of theſe ſeveral parts, have ſtill minuter peculiarities in the evidence appropriated to them. An unprejudiced mind will in each of theſe be convinced by that ſpecies of argument which is peculiar to it, tho' it does not reflect how it comes to be convinced. By being converſant in *them*, one is prepared for the ſtudy of *Logic* ; for *they* ſupply them with a fund of materials ; in *them*, the different kinds of evidence and argument are exemplified ; from *them* only, thoſe illuſtrations can be taken, without which, *its* rules and precepts muſt be unintelligible.

ALL juſt concluſions, concerning the works of nature, muſt be founded on an induction of particulars. And as in *Natural Philoſophy*, theſe particulars are ſupplied by

by obſervations and experiments on *Natural Bodies*, ſo in *Logic* the particulars, of which an induction muſt be made, are to be learned only from the body of *Arts and Sciences*. Theſe are the ſubjects on which obſervations muſt be made, in order to lay down rules for inveſtigating and proving the truths of which they are made up; juſt as the genuine performances of any art are what muſt be conſidered and obſerved, in laying down the rules of that art. No ſolid precept can be formed in Logic, except by examining arts and ſciences, and attending to the method of reaſoning uſed in them, and to the evidence that accompanies it. In proportion as they are cultivated, and no farther, Logic may be improved.* And what is true of the invention of Logic, is true likewiſe of the ſtudy of it.

* Artem inveniendi cum invento adoleſcere ſtatuat.

Verulam de interpret. naturæ Aphoriſm.

It can be underſtood no farther than the ſeveral ſciences, which it reviews and criticiſes, are previouſly underſtood. Accordingly we find, that all the ſyſtems of Logic which have not been compiled from a careful review and examination of the ſeveral ſciences, conſiſt more of ingenious ſubtleties, than of uſeful precepts aſſiſting to the mind in the various parts of knowledge. And when Logic has been learned before the other ſciences, the ſubſtantial parts of it have been ſcarce attended to, or made any uſe of, in the proſecution of *them*; nor ſo much as underſtood, but in as far as the mind was gradually opened, and brought to recollect them in its progreſs thro' the ſciences. Let us illuſtrate this by a parallel caſe.

Logic is preciſely the ſame to *Philoſophy*, that works of criticiſm are to *Poetry*. The rules of criticiſm are formed by an accurate ſcrutiny and examination of the beſt works

works of poetry. To one who had never read a poem, theſe rules would be obſcure and uſeleſs ; he could not comprehend them, far leſs would he be able to form a judgment of their juſtneſs, and of the reaſons on which they are founded. If one peruſes the beſt poetical performances, he will acquire ſome degree of taſte, tho' he has never profeſſedly ſtudied the rules of criticiſm ; and he will, at the ſame time, lay in materials, and obtain a ſtock of examples, which may render theſe rules intelligible to him, and enable him to judge whether they are juſt or not. And by afterwards ſtudying theſe rules, he improves, refines and corrects his taſte, perceives the principles on which he has founded all his judgments, tho' he did not in the mean time, think of them, and gains additional ſecurity againſt his judging wrong. This may illuſtrate what has been ſaid of the place which Logic ought to hold among the ſciences. The obſervations made in

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it, both concerning the methods of invention, and of probation, are founded on, and deduced from, the ſeveral ſciences in which theſe methods are uſed. Neither the obſervations themſelves, nor the reaſons on which they are built, can be fully comprehended by one abſolutely ignorant of theſe ſciences. In ſtudying the particular ſciences, reaſon will ſpontaneouſly exert itſelf: if the proper and natural method of reaſoning is uſed, the mind will by the native force of its faculties perceive the evidence and be convinced by it, tho' it does not reflect how this comes to paſs, nor explicitely conſider according to what general rules the underſtanding is exerted. By afterwards ſtudying theſe rules, one will be farther fitted for proſecuting the ſeveral ſciences; the knowledge of the grounds and laws of evidence will give him the ſecurity of *reflection*, againſt employing wrong methods of proof and improper kinds of evidence, additional to that of *inſtinct* and *natural*

tural genius. And thus Logic will greatly contribute to improvement in knowledge; and more ſo, when it is uſed as a *review* of the method taken in the proſecution of ſcience, of the foundations gone upon, and of the general rules that have been obſerved, than when it is applied as an *introduction* to the elements of ſcience: for in the former caſe, its rules can be perfectly underſtood, ſufficiently illuſtrated, and put in practice as they are learned, which in the latter is quite impoſſible.

THERE is one objection that may ſtill remain to what has been ſaid, viz. "That the elements of the other ſciences "muſt be taught with diſadvantage, when "the ſtudent is wholly unacquainted with "the rules of reaſoning obſerved in them." But we have ſeen that Logic can ſcarce be taught at all till theſe elements are learned, at leaſt not ſo as to produce any conſiderable advantage in the ſtudy of Philoſophy; its

its rules being but ill underſtood, thro' ignorance of the examples by which they are to be illuſtrated, and of the particulars on which they are founded, will be forgot before there is occaſion to apply them, or, if they are remembred, the ſtudent having but an indiſtinct conception of them, is incapable of applying them. Beſides, there will not be found ſo great inconvenience as is apprehended, in ſtudying the elements of ſcience, without a previous knowledge of the precepts of Logic. Man is naturally poſſeſſed of reaſon and genius, and capable of exerting it with tolerable juſtneſs on a variety of ſubjects, before he is formally inſtructed in the rules of reaſoning; of himſelf, he conforms to them, as it were by inſtinct, without reflecting or explicitely knowing what they are. Lay before a man of ordinary underſtanding a piece of juſt reaſoning in any of the ſciences, and he ſhall be convinced by it, tho' he never heard of the artificial rules of reaſoning, or reflected

reflected on the nature and foundation of the evidence that attends it. It is in fact only by obſerving the natural reaſonings of mankind, that juſt *rules* of reaſoning can be diſcovered, or an uſeful theory of evidence eſtabliſhed. But if the natural force of reaſon and genius is thought inſufficient to conduct the ſtudent thro' the elements of ſcience, it is eaſy in teaching them, to make ſuch occaſional obſervations on the evidence uſed, as will be of much greater benefit than a ſyſtem of Logic previouſly learned, or rather conned by rote. Thus if one were inſtructing a pupil to read Poetry with ſomething of taſte, who were not as yet ſufficiently qualified for a formal treatiſe of Criticiſm, he would in going thro' ſome regular performance, point out its beauties and faults, and make ſcattered obſervations on the rules of compoſition, which would be of much greater ſervice than if he had put into his hands a didactic treatiſe of precepts, before he had been

ſufficiently prepared by a peruſal of the works of Poets. We have already obſerved that the ſeveral ſciences conſidered with reſpect to their evidence form, as it were, the *ſylva*, the natural hiſtory of the human intellect and its operations on which Logic is built: and as the natural hiſtories on which the other ſciences are founded, need not confine themſelves to bare narration, but ought to interſperſe occaſionally general obſervations upon the hiſtory, which will promote and prepare for the philoſophical interpretation of them *; ſo in teaching the ſeveral ſciences, ſuch obſervations may be introduced on

* Superſunt additamenta quædam hiſtoriæ naturalis utilia, quæ eam magis commode inflectere et aptare poſſint ad opus interpretis, quod ſuccedit.---Non abs re fuerit obſervationes quandoque aſpergere.---Etiam canones (qui nil aliud ſunt quam obſervationes generales et catholicæ) optime aſcribuntur. *Verulam. Paraſceu. ad Hiſt. nat et Exper Aph* 9.

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the arguments uſed in them and the evidence attending them, as will in a great meaſure make the learner ſee, as he proceeds, the foundations on which he reaſons, and the laws which he obſerves, and will at the ſame time prove an excellent preparation to the ſtudy of Logic.

LET it be further obſerved upon this head, That, by the regulations now eſtabliſhed in the Mariſchal College, all the ſtudents being obliged to apply themſelves to the ſtudy of Mathematics, how ſoon they enter upon the ſecond year of their courſe, they are not only prepared by that ſtudy, for underſtanding natural Philoſophy, or the ſcience of bodies; but are gradually, and as it were neceſſarily, led both into an habit of cloſe attention of mind, and likewiſe of juſt and accurate reaſoning, by having the moſt perfect examples of juſt reaſoning laid before them. *

* In Geometria partem fatentur eſſe uti-

WHAT has been ſaid will 'tis hoped abundantly ſhow that genuine Logic may with greater propriety and ſucceſs be taught as a critical review of the ſciences, than as an introduction to them, and that, inſtead of being the firſt, it ought naturally to be the laſt.

IT will not however be improper farther to take notice of the prejudice that may ariſe againſt the place aſſigned to Logic, from the contrary practice of the greateſt part of the ancient Philoſophers. This will appear to be of ſmall weight, if we conſider what was the nature and deſign of the Logic adopted by them. It is well known that the ancient Greeks were above all nations talkative, and fond of extemporary diſputes on either ſide of any

lem teneris ætatibus: agitari namque animos, atque acui ingenia, et celeritatem percipiendi venire inde concedunt. Quint. Inſtit. Lib. 1. See alſo Mr. Locke on the conduct of the underſt. Sect. 7.

queſtion.

queſtion. Logic was introduced by Zeno the diſciple of Parmenides, as is believed, * as a help in managing readily and copiouſly theſe diſputations, and not as a mean of diſcovering truth; accordingly it regarded not things but words, and conſiſted of a collection of obſervations made on human converſations, and reduced to general rules the heads of argument and diſcourſe on any ſubject. When this was the nature, and this the deſign of Logic, it had no ſuch dependence on the other parts of ſcience, as to require a previous knowledge of them, and came in naturally enough among the arts of kin to it, which likewiſe regarded language. That this is a juſt account of the ancient Logic, can ſcarce be diſputed. It was ſeldom applied by the beſt of the ancients to the making of diſcoveries in the other ſciences; and when it was, it only ſerved to vitiate and fetter their inventions: its chief uſe was to ſerve as a

* Diog. Laert. præf.

foundation

foundation for rhetorical invention and ſubtlety, and in this view we find it is always conſidered by Cicero and the other writers of inſtitutions. Since then the Logic commonly in uſe among the ancients regarded only words, but that now introduced (of which ſome of the ancients, eſpecially SOCRATES and his diſciples, gave ſome hints, and which has ſince been greatly cultivated by LORD VERULAM, Mr. LOCKE, and others) regards things and real knowledge, no argument can be drawn from the place aſſigned to that, for the place which ought to be aſſigned to this. But whatever has been the opinion of Philoſophers, it can have very little weight, in oppoſition to reaſon, when men are ſolicitous, not about the philoſophy of this or that particular man, but about the philoſophy of nature. The place of Logic being once determined, it will be eaſy to aſcertain the order of the other ſciences, natural Philoſophy, Pneumatics, Ethics, and Politics.

ETHICS,

ETHICS, or moral Philoſophy is founded as well as Logic on Pneumatics, and muſt therefore come after it. The conſtitution of man, and his ſeveral active powers muſt be explained, before his buſineſs, his duty, and his happineſs can be diſcovered. Juriſprudence and Politics, taking a more complex view of man than Morals, by conſidering his various ſtates, as well as his nature and powers, cannot with any propriety be introduced till Morals have firſt been ſtudied.

IT only remains then to determine whether natural Philoſophy or Pneumatology, ought in the order of teaching to have the preference. And many conſiderations ſeem to require that the former ſhould be ſtudied firſt. If it were not, Pneumatology ſhould be too far disjoined from the practical ſciences founded on it, one of which, Logic, ought, as we have ſeen, to be taught laſt of all. Beſides, we ought always

ways to begin with the eaſieſt and moſt obvious ſubjects, and to proceed gradually to the moſt difficult; and in order to this we ought to comply as much as poſſible, with the natural openings and progreſs of the human mind. Now it is evident that the mind receives firſt of all impreſſions and ideas of thoſe ſenſible things with which it is ſurrounded. It is not till after it has exerciſed its faculties about them that it reflects on its own operations or acquires perceptions of them. We are from our earlieſt infancy accuſtomed to obſerve external things, tho' often tranſiently and inattentively; they lie always in our view, they force themſelves upon us, and we cannot avoid regarding them more or leſs. But we ſeldom attend to the operations of our minds in our earlier years; it is late before we acquire diſtinct notions of them, or can eaſily and readily make them the objects of our contemplation. Farther, external ſenſation, by which bodies are perceived,

ceived, is a more palpable kind of evidence, than internal, from which all our knowledge of ſpirits is derived; it ſtrikes and affects us more. The Philoſophy of ſpirits, as well as that of bodies, is founded ſolely on experiments and obſervations; but in the latter it is much eaſier to make theſe than in the former: we can put *bodies* in any ſituation that we pleaſe, and obſerve at leiſure their effects on one another; but the phœnomena of the *mind* are of a leſs conſtant nature; we muſt catch them in an inſtant, and be content to glean them up by obſerving their effects, as they accidentally diſcover themſelves in the ſeveral circumſtances of life. The reaſonings alſo by which concluſions are deduced concerning mind are of a more abſtruſe and difficult nature than thoſe employed in the ſcience of bodies; the ideas about which they are converſant are apter to be confounded with one another, and are with greater difficulty kept diſtinct. On all

theſe accounts, natural Philoſophy muſt be to young minds eaſier than Pneumatology, and conſequently ſhould be taught firſt.

THERE remains one part of the ſcholaſtic Philoſophy not yet taken notice of, viz. that part of their Metaphyſic which is termed Ontology. The end it anſwered in their ſyſtem was mentioned already; and ſince Philoſophy has been ſet upon another footing, it is become leſs neceſſary than formerly. Any real knowledge which it contains may be delivered after all the other ſciences. Or rather, in its place may be ſubſtituted a more uſeful ſcience,—including the Firſt Philoſophy of Lord Verulam;—at the ſame time tracing up the particular cauſes of things, as far as poſſible, to the moſt general and ſimple principles, not by abſtract reaſonings, or the compariſon of general ideas, but by a legitimate and careful induction; and vindicating the conſtitution of nature by pointing out the final cauſes

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of the general laws to which beings are ſubjected;—and likewiſe giving an account of the reaſonings of learned men on various ſubjects conſidered in an abſtract view, and their opinions and enquiries concerning queſtions of an abſtruſe nature, ſuch as the exiſtence of matter, ſpace, duration, &c.

THESE obſervations will, 'tis hoped, be ſufficient to ſhow that the Maſters of the Mariſchal College have conſulted the natural connexion of things, in altering the uſual order of teaching Philoſophy. On theſe principles it is, that they have now eſtabliſhed the following general Plan of Education.

I. THE FIRST year is ſpent as formerly in Claſſical Learning under the *Profeſſor of Greek*; whoſe buſineſs it is, not only to teach that elegant language in which the ſciences were firſt delivered, and which,

by retaining their original terms, and by being uſed by thoſe great maſters whoſe works are ſtill acknowledged ſtandards in them, muſt always be regarded as the foundation of knowledge, but to open the minds of youth, by explaining antiquity, by acquainting them with the lives and characters of the chief claſſic authors, and by pointing out the uſes of Literature, or the various purpoſes it ſerves in life.

II. In the NEXT Claſs, as much of the ſtudent's time as the Profeſſor thinks proper, is ſpent in reading the Greek and Latin claſſics, both that they may ſtill improve in theſe languages, the great conduits thro' which ancient learning is communicated to us, and that by being converſant with the beſt authors, they may early acquire a taſte for works of genius. 2. They are to be inſtructed in *Hiſtory*, both *Natural* and *Civil*, along with the Elements of *Geography* and *Chronology*, on which Civil

vil Hiſtory depends. The ſtudy of theſe is judged to be a juſt intermediate ſtep between the ſtudy of languages and general reaſonings concerning things. Hiſtory conveys to a young mind inſtructions adapted to its faculties, which at the ſame time open and prepare it gradually for apprehending the concluſions of Philoſophy. Farther, on the facts that Hiſtory, eſpecially natural, relates, Philoſophy, which is but a picture of the real conſtitutions and laws of things, muſt be entirely founded. In the proſecution of it there muſt be a perpetual intercourſe between the mind and nature. Philoſophy can never be further improved than in proportion as Hiſtory is perfected; our knowledge in the one and the other muſt keep pace, for Hiſtory relates the phœnomena, and Philoſophy explains and accounts for them. The ſtudy of Hiſtory, particularly Natural Hiſtory, muſt therefore be proper to precede that of Philoſophy, not only as it opens the mind, but alſo

ſo as it furniſhes it with the requiſite materials. Theſe are parts of knowledge, entirely omitted in the former method of univerſity education, tho' of the greateſt utility and moment in life. And it is, they apprehend, a conſiderable advantage in their new plan of teaching, that by it theſe uſeful branches of ſtudy are introduced into the ſcheme of Education. Natural hiſtory, beſides its advantages already mentioned, is the immediate foundation of almoſt all the arts of life, agriculture, gardening, manufactures, medicines, &c. The profeſſor to whoſe ſhare it falls, does not confine it to mere deſcriptions of natural bodies, their various claſſes, characters, principles and parts; but gives an account alſo of the various uſes of theſe natural bodies, and of the principles of the ſeveral arts in life which depend upon, and are employed about them. Nor is Civil Hiſtory reſtricted to a narration of Epochs and facts, tho' in that the foundation is laid,

but

but it extends to an explication of the cauſes of the riſe and fall of ſtates, and of the great revolutions that have happen'd in the world, and to reflections on characters, manners, cuſtoms, &c. which conſtitutes its uſefulneſs in general, and muſt render it peculiarly advantageous to young perſons, by conveying moral inſtruction by example; by forming a habit of attention to the great tranſactions of men; by ſupplying their want of experience by that of others, and by making them in a great meaſure acquainted with the world, before they come to act a part in it. 3. At the ſame time the ſtudents in this Claſs attend the Profeſſor of Mathematics for the Elementary parts, as the knowledge of the mathematical ſciences is an abſolutely neceſſary key to the Philoſophy of bodies.

III. As material Objects are the moſt familiar to young minds, and experiments and reaſonings concerning them are moſt level

level to their capacities, the ſtudents in the THIRD year of their courſe, enter on the ſtudy of *Natural* and *Experimental* Philoſophy, and are inſtructed in its ſeveral branches, Mechanics, Hydroſtatics, Pneumatics, Optics, Aſtronomy, Magnetiſm, Electricity, and any others which farther diſcoveries may add to the parts already cultivated. 2. They are, as far as time will allow, inſtructed in the principles of Criticiſm and the *Belles Lettres*. 3. They at the ſame time continue their mathematical ſtudies, ſo as they may go hand in hand with their ſtudies in the different parts of Natural Philoſophy.*

* THE profeſſor of mathematics, the firſt year the ſtudents are under his care, explains to them the true principles of Arithmetic, teaches Euclid's Elements of Geometry, plain [illegible]igonometry, Practical Geometry, Geograp[illegible], and the firſt principles of Algebra. The ſecond year of their Courſe with him, he teaches Spherical Trigonometry, Spherical Geometry, Conic Sections, and Aſtronomy; and carries his pupils for-

IV. IN

IV. In the LAST year of the Philoſophic courſe, are taught, 1. Pneumatology, or the Natural Philoſophy of Spirits, including the doctrine of the nature, faculties, and ſtates of the human mind,—and Natural Theology. 2. Moral Philoſophy, containing Ethics, Juriſprudence and Politics, the ſtudy of theſe being accompanied with the peruſal of ſome of the beſt of the ancient Moraliſts. 3. Logic, or the laws and rules of inventing, proving, retaining, and communicating knowledge; along with 4. Metaphyſics.

THE three Profeſſors of Philoſophy, and the Profeſſor of Greek attend their ſtudents, three hours a day as formerly, during the whole of the ſeſſion of College,

ward to the higher parts of Algebra. The third year he teaches the higheſt parts of Algebra, the Doctrine of the Quadrature of Curves, and Fluxions, and ſome parts of Sir I. NEWTON's Principles of Philoſophy.

which commences on the firſt day of November, and ends in April.

THE order of the ſciences now eſtabliſhed was pretty much obſerved by ſome of the ancient Stoics, particularly PANÆTIUS and POSSIDONIUS. EPICTETUS alſo in one particular inſtance inſinuates that he look'd on it as the proper method.* It in the main agrees with the partitions of ſcience laid down by LORD VERULAM, and perfectly ſuits the genius of his Philoſophy. It appears to be that in which the ſciences will afford moſt light to one another, and in which they will have the moſt uſeful influence on life. It is adapted to the natures and genuine order of things, and tends to promote the real knowledge of them. This the Maſters of the Mariſchal College have aimed at in the alteration they have made.

* Enchirid. cap. 76.

They

They have already begun to experience the public approbation, by the increaſe of the number of their ſtudents. They have now publiſhed the reaſons which determined them to it, and leave mankind to judge of their ſolidity and ſtrength.

THE END.